

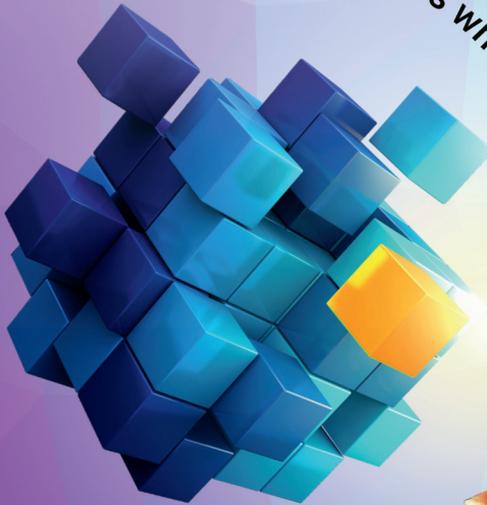


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# South Asia Procurement Innovation Awards 2017

This publication is a compilation of abstracts of submissions made by procurement entities from Government, Public Sector, Autonomous, University or Research and Training Institutions following the Public Procurement regulatory framework, and NGOs/CBOs involved in Public Procurement Management and Oversight Support in the South Asian countries of Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka for South Asia Procurement Innovation Awards 2017. This compilation of abstracts is prepared as a knowledge product for wider dissemination of innovative procurement practices in South Asia. It is based on the original submissions, edited and with additional researched inputs, for providing a consistent presentation of all cases. The original submissions by the Award Winners are available at "<https://www.procurementinet.org/sapia/>".

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# Winners

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## Afghanistan

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Independent Monitoring and Evaluation of Contracted Health Services Leads to Improved Outcomes in Rural Areas of Afghanistan

Grants and Service Contracts Management Unit, Ministry of Public Health, Kabul, Afghanistan

## Bangladesh

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Innovations in Procurement Process and Selection that Lead to Improved Outcomes – Tenderers' Database Management System

Roads and Highways Department, Dhaka, Bangladesh



Achieving Better Value for Money Using e-Auction for Procurement of Goods by Public Sector – A Success Case from DPDC

Dhaka Power Distribution Company (DPDC), Dhaka, Bangladesh

## Bhutan

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Web-Based Online Evaluation Tool (e-Tool) for Procurement of Works by Royal Government of Bhutan

Construction Development Board, Thimphu, Bhutan



GNH Model for Procurement of Works that Ensures Social, Economic, and Environmental Sustainability – Case Study on Successful Community Contracting in Bhutan

Jigme Namgyel Engineering College (JNEC), Dewathang, Bhutan

## India

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Unlocking Energy Efficiency Market in India – Through Innovative Procurement Business Model

Energy Efficiency Services Limited (EESL), New Delhi, India



GePNIC – A Futuristic Technology Solution for Good Governance in India

National Informatics Centre (NIC), New Delhi, India



Public Private Partnership for Laboratory Services in Public Hospitals of Uttar Pradesh with Innovative Web-Enabled Verification Mechanisms

UP Health System Strengthening Project (UPHSSP), Lucknow, India

## Maldives

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e-Council System with Integrated Procurement and Financial Management Driving Development in Maldives

Local Government Authority, Male, Maldives

## Nepal

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MIS-Driven Roster of Individual Consultants Enabling Achievement of Annual Targets in the Community Project of Nepal's Poverty Alleviation Fund

Poverty Alleviation Fund (PAF), Kathmandu, Nepal

## Pakistan

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Pointer – Eyes and Ears of Project Supervision for KP-Southern Area Development Project

Southern Area Development Project, Dera Ismail Khan KPK, Pakistan

## Sri Lanka

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Guide to Project Management and Contract Management (GPMCM) – New Approach to Improve Efficiency and Effectiveness of Procurement Outcomes

Ministry of Finance and Mass Media, Colombo, Sri Lanka

# Foreword

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South Asia Procurement Innovation Awards, now into their successful second edition, celebrate the most forward-thinking efforts made during 2017 by public sector procurement entities in 8 countries. The Awards recognize the innovative thinking that has gone in and the way information and communication technology has been seamlessly utilized towards achieving better value for money, efficiency, and transparency in a wide range of procurement scenarios. With 78 submissions and a winner selected for every country, these coveted Awards are a feather in the cap of procurement professionals in South Asia. The wide-spread response and acclaim that these Awards have received make it clear that they are here to stay for many more years.

The second successful conclusion of the Awards reaffirms the strong partnership between members of the South Asia Public Procurement Network (SAPPN), consisting of all procurement policy and regulatory bodies of the region, the World Bank, and its knowledge and networking platform Procurement iNET. This partnership goes a long way in achieving the objectives of enhancing learning and knowledge sharing with regard to innovative procurement practices adopted within the South Asian countries.

A review of the submissions shows that public procurement is moving away from mere administrative and operational focus to strategic thinking for delivering developmental objectives of institutions. There are clear evidences that procurement processes are driving Social, Economic, and Environmental Sustainability; with transparency and enhanced efficiency.

I congratulate each and every winner from Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. I also compliment rest of the entities that have submitted highly competitive and commendable submissions. I take this opportunity to thank the heads of procurement and their offices in all South Asian countries for disseminating information about the Awards and encouraging procurement entities to participate in the Awards' competition.

I do wish this initiative widely spreads information about the good and innovative procurement practices of each country; practices that can be adapted by many institutions involved in procurement and contract management in other countries. I hope this compendium of innovations in South Asia becomes a ready reference for procurement professionals and practitioners across the world.

## **Elmas Arisoy**

Practice Manager  
Solutions and Innovations in Procurement (SIP)  
Governance Global Practice (GGP), The World Bank



# Introduction

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“In procurement, ideas that win are ideas that work!”

Seventy-eight submissions received from 8 countries for the South Asia Procurement Innovation Awards 2017 resonate the above message sent across to procurement entities from November to December 2017 for participating in this keenly contested competition. The 12 winners featured in this compendium represent ideas that range from the power of consolidating demand in procurement for influencing production and pricing strategies in energy-efficient products; utilizing advancement of remote sensing and mobile-based voiceover technologies for monitoring and measuring contract performance; to integrating procurement with other local administrative functions through web-enabled e-councils for efficiency gains in island nations.

In general, submissions in this second edition of the Awards have been of a higher quality, focusing on issues like integration of e-procurement function with other business processes of entities; using newer methods in procurement for reducing administrative processes; a renewed attention to effective contract management, etc. There have also been discernible efforts seen towards eliminating possibilities of disputes.

This compendium summarizes the 12 winning case stories from Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. They are edited and abridged presentations of original submissions, with additional research inputs incorporated for standardization. Original detailed submissions are available at <https://www.procurementinet.org/sapia/>

South Asia Procurement Innovation Awards 2017 has become a success owing to extensive cooperation and support received from public procurement entities that took out time and made efforts for submitting their case stories. We thank them for their enthusiasm and active participation in the competition. Heads of Procurement in South Asian countries have promoted the Awards extensively among their departments, public sector enterprises, and other eligible bodies for participation. World Bank Country Focal Points for Procurement and other staff too advocated with their counterparts; and without their active interest, we would not have achieved this success.

We also place on record our appreciation of Ms. Elmas Arisoy, Manager-South Asia, Solutions and Innovations in Procurement, World Bank, for her guidance and support. Further, we would like to thank Mr. Plamen Kirov, Mr. Naushad Khan, Ms. Payal Malik Madan, Ms. Yodit Rezene, and Mr. Varun Malhotra for their efforts towards successful conduct of Awards 2017. Information Technology support extended by C&K Management has ensured seamless online submission and ease of access for participants from anywhere in South Asia at anytime. We would like to thank the C&K team led by Mr. Ravi Ramakrishnan and Mr. Mohammed Ishaq, Mr. Srinivas Balusu, and Mr. Naveen Pammi for their support. Editorial support from Mr. Rajaram Sankla is also highly appreciated.

**A K Kalesh Kumar**  
Coordinator, SAPIA 2017



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## Citation

The submission from GCMU, Ministry of Public Health (MoPH), is awarded the winner for Afghanistan SAPIA 2017 for its efficient monitoring of health service delivery implementation efforts by linking performance and payment to service provider NGOs with a third-party monitoring process. The third-party monitoring agency measures a range of relevant outcome and process indicators against the service levels set for the health service provider NGOs, and a portion of payments is linked to meeting these indicators. The third party, an International agency in association with a local agency, produces data that helps GCMU develop action plans, which are implemented and followed up for improvement of main indicators. In Fragile, Conflict and Violence (FCV) environments, where physical access to project areas is not always available to project authorities for security reasons, this approach is noteworthy for its effective contract supervision and management. The contractual arrangements of setting aside 10% payment of the contracted value to performance against



verification of parameters set in the MoPH's Health Management Information System (HMIS), 10% payment against the health systems' functionality, as attested by the third-party monitor, and, finally, 80% of payment against submission of a quarterly technical report is considered innovative for the demanding environment in Afghanistan. The selection recognizes that such third-party monitoring arrangements with defined performance-based specifications can be best used with right approach for procurement, viz. non-consulting services, to deliver better outcomes and results.

# Independent Monitoring and Evaluation of Contracted Health Services Leads to Improved Outcomes in Rural Areas of Afghanistan



{This article is an abridged version of the submission on “Independent Monitoring and Evaluation of Contracted Health Services Leads to Improved Outcomes in Rural Areas of Afghanistan” made by Mr. Khwaja Mir Islam SAEED, Head of GCMU, Ministry of Public Health, Kabul, Afghanistan, for the South Asia Procurement Innovation Awards.}



## Summary

Afghanistan's Ministry of Public Health (MoPH), through its Grants and Service Contracts Management Unit (GCMU), is using contractors to provide health services to the Afghan people. To ensure efficacy and efficiency of these services, the ministry has taken the international competitive bid route to implement a Third Party Monitoring and Evaluation project. The project has turned out to be a novel mechanism for collecting good quality and independently verified information. This has ensured proper monitoring of

both the overall achievement of the health sector as well as performance of individual contracted service providers. The Third Party monitors a range of processes and outcome indicators involving the entire health sector. Data thus collected is used to evaluate performance and pay health service providers accordingly. Third Party monitoring has also generated trust and confidence within the public regarding the health services they are getting.

Maternal Mortality Rate (MMR) of 1,600 per 100,000 live births in 2002 has come down to 396 in 2015.

The under 5 years' mortality rate has dropped 60 percent from 137 per 1,000 live births in 2002 to 55 in 2016.

Births attended by skilled health personnel increased to 58 percent from 14.3 percent.

Helped the GCMU and NGOs to develop action plans for bringing improvements in the main health indicators.

## Background

In 2003, the Afghanistan Government decided to limit its role in health sector to one of stewardship, involving policy setting, regulation and monitoring. Provision of actual services has since been contracted out according to specifications of the MoPH. This system was first introduced in all primary health care services and later followed by first and secondary hospitals in the country. To monitor the effects of this large scale contracting out of health service provision, the MoPH, through the GCMU, designed an independent Third Party Monitoring and Evaluation project, for which a firm was contracted after international competitive bidding. The reach of the Third Party, appointed in 2015, is country wide and includes less secure areas or areas with limited access for government staff.

## Challenges Addressed

Functions of the Third Party in the most recent contract include:

1. Health Management Information

System and Health Facility Functionality Verification: Takes place every half year. It directly monitors achievements of all contracted Non-State providers, who are paid based on their performance and functionality verification.

2. National Health Facility Assessment with the use of a Balanced Scorecard: Takes place on an annual basis. The purpose is to summarize the performance of Afghanistan's provinces in delivery of the Basic Package of Health Services (BPHS) as well as the Essential Package of Hospital Services (EPHS). This provides policy and decision makers evidence with regard to areas of strengths and weaknesses.
3. National Afghan Household Survey (AHS): The AHS is to measure key health and nutrition sector indicators within the population of all provinces through a random survey of



24,000 households.

4. Drug Quality Assessments (DQA):  
The annual DQAs assess the quality of drugs as collected from a sample of health facilities throughout the country, including laboratories.

## Impacts Generated

Third Party Monitoring and Evaluation has provided good quality information, which has enabled Government of Afghanistan to improve health outcomes. For example, the Maternal Mortality Rate (MMR) of 1,600 per 100,000 live births in 2002 has



come down to 396 in 2015; the under 5 years' mortality rate has dropped 60 percent from 137 per 1,000 live births in 2002 to 55 in 2016. Births attended by skilled health personnel increased to 58 percent from 14.3 percent over the same period. Third Party data has helped the GCMU and NGOs to develop action plans for bringing improvements in the main health indicators. The immediate impact has been improvement in health services and identification of deficiencies. These assist donors and MoPH in understanding the overall status and focus on gaps that need to be bridged.

## Level of Innovation

To improve performance of contractors (normally NGOs) in delivering health services, the GCMU has moved away from payment of a basic fee to an incentive system, where payment is based on performance. In the new system, 10% of the contracted amount is paid against verification of parameters set in the MoPH's Health Management Information System (HMIS). Another 10% payment is against the functionality of health systems, as attested by a Third Party Monitor contracted by the GCMU. The final 80% of payment is made

following submission of a quarterly technical report. All these three actions involve a specific level of performance before payment is made.

The third party monitoring system has improved monitoring of contractors in the delivery of health services, particularly in remote areas. The concept is innovative. Even though it requires an additional cost for monitoring activities, it is outweighed by the benefit of ensuring proper health delivery to provinces. Introduction of a performance-based payments system has provided more value for money.

## Scalability and Sustainability

These innovative ideas have been studied and applied in other countries as well to achieve better outcomes in their health procurement, particularly when they are operating in difficult and fragile environments and performance requires measurement and improvement. Contracts with service providers, mostly international and local NGOs, one or more per province, are based on a competitive bidding process and are handled by Grants and Service Contracts Management Unit of MoPH. Current evidence shows that in the long run, there is sufficient improvement when hiring a third party to monitor health services. It is possible to make this innovation part of all public procurement service offices, including works, goods, and consultancy and non-consultancy services in similar and even non-similar settings.

### Lessons Learned

Despite the progress made, the MoPH has faced challenges when implementing third party evaluation.

Delays in carrying out planned activities and late submission of deliverables/ reports are the main challenges during contract execution with the 3rd party, which undermines operational needs of the MoPH.

When viewed holistically, however, procuring and contracting a third party monitoring system has heralded widespread changes in quality of health service delivery.

The country-wide contracting out of health services is unique in the world. It shows overall good results in terms of increased access to health services and improved health indicators.

However, effective and regular monitoring is necessary to ensure that health services are delivered successfully throughout the 34 provinces of Afghanistan. Many of these provinces are in remote and security-sensitive locations; hence health service delivery is difficult and knowing whether the contractor is delivering satisfactory services is a major issue.

While MoPH is committed towards monitoring activities of the public health facilities, independent performance evaluation of BPHS and EPHS services is equally important.

Independent collection of data and information related to health services will help remove potential biases that may arise while reporting performance of NGOs. Therefore, MoPH is committed to engaging an independent evaluator to objectively assess performance and progress in delivery of health services in Afghanistan.







## Citation

The online Tenderers' Database Management System (TDMS) introduced by Roads and Highways Department (RHD), Dhaka, is selected as the Country Winner SAPIA 2017. TDMS captures information and testimonials of tenderers, like post qualification information that, once verified, serves as an easy tool for evaluation process. When similar works and services from similar providers are repeatedly sought, such kind of effort aligned with country's e-procurement system is very useful for expediting routine procurement. This is the current trend seen in many well-developed procurement systems, with nationwide information and performance databanks being created. In that direction, this innovation from Bangladesh is noteworthy. Though the RHD initially designed TDMS for 200 tenderers, it has already captured details of 800 tenderers. 110 evaluations have been completed using TDMS. This serves as an "Online Evaluation



Dashboard", starting from Preliminary Examination, Technical Examination, Tenderers' List, to Evaluation History and so on. This helps capture previous experience and saves considerable time otherwise required for filling up info by tenderers, and also in manual evaluation of these by procurement entities. For scalability, the Central Procurement Technical Unit (CPTU) of Bangladesh is using TDMS as a pilot and plans to use it system-wide along with the e-GP.

# Innovations in Procurement Process and Selection that Lead to Improved Outcomes – Tenderers’ Database Management System



{This article is an abridged version of the submission on “Innovations in Procurement Process and Selection that Lead to Improved Outcomes – Tenderers’ Database Management System” made by Ms. Kazi Sayeda Momtaz, Computer System Analyst, Roads and Highways Department, Dhaka, Bangladesh, for the South Asia Procurement Innovation Awards.}



## Summary

The Roads and Highways Department of Government of Bangladesh has evolved an innovative Tenderers’ Database Management System (TDMS). The system is innovative because any evaluator can use its database to easily, accurately, and transparently complete evaluation of a tender document within 5-10 minutes. TDMS helps the Procuring Entity as well as tenderers build a repository of information and documents for their own use from anywhere and anytime. Procuring Entity can use data and documents of tenderers from TDMS to

meet its information needs about tenderers’ qualification, capability, financial strength, human resource, any litigation, and so on. This leads to improved outcomes for the Roads and Highways Department. The same can also be customized by other departments in the country for their own use.

## Challenges Addressed

Collecting data for TDMS was challenging. Tenderers were reluctant in sharing their information with the Roads and Highways Department (RHD). The department arranged

- | About 800 tenderers registered with the TDMS.
- | 110 evaluations are completed using the TDMS, which is considered a great achievement.
- | Tenderers and Procuring Entity can store and update data and documents in TDMS.
- | Procuring Entity is able to use data and documents of tenderers from TDMS to meet its information needs.

workshops in different zones of Bangladesh to encourage information sharing by tenderers, who were assured by RHD that their data will be secure and safe. Tenderers were told that they will be given their own user IDs using which they themselves can update their data and ensure their privacy. Finally, the tenderers were convinced, with about 800 of them registering with the TDMS.

### Impacts Generated

Already, 110 evaluations have been completed using the TDMS, which is considered a great achievement. Tenderers and Procuring Entity can store and update data and documents in TDMS just as they manually maintain their own file cabinet. They can view and download the necessary information and documents, a facility that is of great advantage to them. The Procuring Entity is able to use data and documents of tenderers from TDMS to meet its information needs about tenderers relating to their capability, resources, financial strength, and litigations, if any, among others.

### Level of Innovation

Following are the advantages of TDMS:

- Tenderers and Procuring Entity can view / download necessary information and documents anytime, anywhere from any device having internet.
- Procuring Entity can use information and document repository from anywhere and anytime:
- It has a multistep process for information and documents' verification to ensure that database in the system is accurate
- Tenderers / users of Procurement Entity concerned can update information and documents into the system at anytime from anywhere. These changes will not be available for further use (such as for evaluation purpose) until they are verified and approved by concerned users of the PE organization
- Evaluator can know the number of pending litigations, value of



litigation claim, and percentage of litigation claimed against net-worth

- Evaluator can acquire the completed work list with multiple search options, calculate general experience, and identify specific experience based on evaluation criteria
- Evaluator can view and analyze on-going works and current commitments with multiple search options
- Evaluator can calculate the value of works in hand within a certain number years (for example, next 3 years) from

has given consent to use TDMS for evaluation of e-GP tenders on a pilot basis with the following conditions: a. The system will be under the domain of RHD b. RHD will maintain the security and confidentiality of the system and make it available to tenderers all the time, so that they do not face any problems when participating in the tender c. If there is any conflicting information in TDMS and e-GP, the information provided in the e-GP system shall prevail.

Accordingly, Chief Engineer, Roads and Highways Department, has ordered that:



IFT publication date

- Evaluator can view summary and details of turnover of various financial years and also calculate average Annual Turnover (for example, last 5 years) from IFT publication date
- Evaluator can estimate the average Annual Turnover considering certain best years (for example, best 6 years). This makes TDMS new and innovative.

1. The tender shall be evaluated in the e-GP system with the help of online database system – TDMS.
2. Qualification information and evidences {such as work experience certificates, on-going works list, payment certificates for construction turnover, equipment list (own or rented), personnel list, etc.} of the tenderers, as mapped in the e-GP tenders, must be available in the TDMS, so that the Tender Evaluation Committee (TEC) can evaluate tenders digitally within a short period of time.

## Replicability

DG, Central Procuring Technical Unit (CPTU), Government of Bangladesh,

3. If there is any conflicting information in TDMS and e-GP, the information provided in the e-GP system shall prevail.
4. A tenderer not having sufficient information in the TDMS system may be evaluated as ineligible.
5. Evaluation Sheet generated by TDMS shall be uploaded into the e-GP system by the TEC.

## Scalability and Sustainability

TDMS reduces conflict of understanding and makes turnover calculation easy. However, it requires individual data centre and internet connectivity in remote area or grass-root levels for accessibility to all. Having 24 Hours Help Desk facility is also very important. TDMS can be scaled for every department after customizing it according to the department's needs and can even be used by another country.

### Lessons Learned

TDMS is a unique database for evaluation of tenders.

Presently, it is restricted only to the Procuring Entity (PE) for evaluating tenders. After evaluating the TDMS, if the Central Procuring Technical Unit (CPTU) so desires, it can be customized for other departments and even other countries after modifications as per needs.

TDMS helps save time, makes evaluation of turnover calculation easy, and reduces conflict because of uniformity in understanding.

TDMS enables selection of the best tenderer and its use is already improving outcomes.







## Citation

This submission from Dhaka Power Distribution Company (DPDC) on e-Auction is selected as the Runner-Up in Bangladesh for SAPIA 2017. The case story is about introducing e-auction when selling end-of-life items. 7 such e-auctions have been completed since its introduction in 2016, which, according to DPDC, is the first time in Bangladesh and has resulted in 11% savings for the company. e-Auctions are used extensively in many procurement regimes for disposal of stocks and items. In Bangladesh context, DPDC being a front runner is a notable feat and hence has been accorded the Runner-Up Award.



# Achieving Better Value for Money Using e-Auction for Procurement of Goods by Public Sector – A Success Case from DPDC



{This article is an abridged version of the submission on “Achieving Better Value for Money for Goods Procured in Public Sector Using e-Auction – A Success Case from DPDC” made by Mr. Salek Mahmud, Executive Engineer, Contract Procurement Circle, Dhaka Power Distribution Company, Dhaka, Bangladesh, for the South Asia Procurement Innovation Awards.}



## Summary

One of the ways to get better value for money for goods procured using public money is to ensure a better selling price for these goods when they come to the end of their usable lifespan. Traditionally, Dhaka Power Distribution Company (DPDC), a government-owned company of Bangladesh, like the country's other public sector organizations, had been disposing 'end-of-life' goods through manual auction system (forward auction), which hinders better returns. DPDC, for the first time in the history of public sector auctions in Bangladesh, introduced an electronic 'e-auction' platform that has

proved to be a very successful innovation by achieving the desired results. The system is highly scalable and adoptable by all public sector organizations of Bangladesh. It is also sustainable in terms of profitability, is pro-people and environment friendly. Still very new in Bangladesh, there is, however, room for improvement in this e-auction system.

## Background

One of the major goals of public procurement is to ensure 'value for money', which means buying goods that are effective and

'End-of-life' goods are being sold in less time compared to previously.

Competition has increased – resulting in better prices for goods sold through e-auction.

Reliable and clear audit trail, accountability, transparency, and fairness within the auction process.

Store management has become easier and space is now free due to timely disposal of used goods.

'economic'. Getting lowest price for goods procured is important but not enough. To achieve economic cost, lowest 'life cycle cost' is to be attained. One of the ways to ensure this is getting a better selling price for goods sold at the end of their usable lifespan. If the return from such salvage is high and disposal cost is low, then the net cost decreases, resulting in higher 'value for money'. Traditionally, in DPDC, like in other public sector organizations of the country, disposal of 'end-of-life' goods had been made by selling them through manual auction system. The manual system has multiple problems, including lack of sufficient competition or no competition at all, resulting in lower than the expected price offer. It is often reported that some unscrupulous bidders manipulate the offer price by making unholy alliances among themselves or applying coercive power to prevent other interested parties from bidding. In this backdrop, DPDC decided to do things differently.

## Challenges Addressed

For the first time in the history of public sector auctions in Bangladesh, DPDC

introduced an electronic 'e-auction' platform for selling used goods; moving the whole auctioning process from the manual mode to electronic mode. This way, till date, DPDC has completed 7 e-auctions. Against the expected value of BDT 7.2 million, a total of BDT 8 million was received, an amount that is 10.77% higher. It is also worth mentioning that even the level of competition has increased.



## Impacts Generated

Introduction of the new e-auction system has made a positive impact in many ways. Now, 'end-of-life' goods are being sold in less time compared to previously, when there was manual auction. Competition has increased – resulting in better prices for goods sold through e-auction. There is reliable and clear audit trail, accountability, transparency, and fairness within the auction process. Store management has become easier and space is now free due to timely disposal of used goods.

## Level of Innovation

In the newly introduced system, interactions between sellers, buyers, and banks are electronic. Banks connected with the DPDC auction system have played a very important role in the system becoming a success. Bidders can transact with DPDC through the designated banks. Received bids are evaluated and a work order issued to the highest qualified bidder through the e-auction site. Then, the winning bidder pays the remaining amount, except the security money deposited earlier, using a payment slip generated by the system at the designated

organizations of other countries, as well as private sector organizations, for selling their used goods.

## Scalability and Sustainability

Any system becomes sustainable if it successfully meets 3 Basic Ps – People, Planet and Profit. The newly introduced e-auction system in DPDC has successfully met these three criteria, apart from being economically beneficial. The system is consistently generating more than average returns from selling of used goods, thereby



bank. A delivery order is issued by the system to the winner for delivery of goods from stores.

## Replicability

The emerging picture clearly shows that the new system is very suitable and highly replicable in all public sector organizations of Bangladesh, as almost the same context like DPDC prevails in them. DPDC is hopeful that this e-auction system will be adopted by all other public sector undertakings of the country with some customization. This auction system may even be adopted by public sector

ensuring capital for future investment. This system has also had a positive impact on macro-economic levels, as goods sold through e-auctions are reused or recycled, thereby boosting the recycle industry and improving the environment. It is also generating more business in the SME sector, leading to employment and contributing to GDP growth.

DPDC represents only a very small portion of the total public sector auction requirement. If all public sector organizations of Bangladesh start working using this type of e-auction system, then overall positive impact on national economy will be significant. As recycling or reuse of goods uses

less energy, it also helps the planet by putting lesser burden on its energy resources. The system is also pro-people, as automation reduces their workload. Further, record keeping is organized and easy.

## Lessons Learned

The following are the lessons learned:

1. Although a 'user manual' provided in the system explains the bidding procedure step by step, it has been reported that a few bidders have failed in bidding for some auctions even after depositing their security money with the bank. When probed, it was found that they attempted to bid at the eleventh hour, and they were not acquainted with the platform. From this experience, DPDC has decided to appoint a 'Help Desk' or person with dedicated phone line when any auction is in 'live' status. Help desk/ designated person will support any bidder who is facing difficulties to bid through the system.
2. The system has been designed with a goal that the potential bidder need not physically come to the DPDC office, except for taking delivery of auctioned goods. It has been found that some bidders prefer to physically inspect the materials under auction, so that they can offer a realistic price. To address this, DPDC is actively considering uploading of video clips of materials under auction in the system.
3. Banks connected with the DPDC auction system play a very important role in the system being successful. Only one bank – EBL – is playing that role so far. This limits the level of competition as many bidders may not find it comfortable to transact through any other bank than their current bank. So, more banks will be given access, thereby ensuring better competition.
4. In this e-auction system, a bidder cannot see the offered price of other bidders when the system is in live status. It is possible to redesign the system in such way that any participating bidder can see the current highest price on offer without knowing the highest bidder. This will increase competition, resulting in a more competitive price.
5. The system has been designed by DPDC using its own IT experts. This system is less secure and may be attacked / hacked any time. To overcome this risk, a high level security system is to be designed in future.







## Citation

This submission is selected as the Winner for Bhutan, given the innovative approach the country has adopted by introducing rated criteria for evaluation and selection in their civil works. The point-based system for evaluation of bids related to civil works has evolved and become a good model for Bhutan in terms of selecting the right contractor while considering promotion of local contractors, skills, materials, etc. The e-tool Contractors' Registration System facilitates direct entry to Higher Class as a contractor qualifies based on historical data of the contracts completed. This has increased the number of Large Class contractors from 66 in June 2011 to 219 as of December 2017, leading to increase in competition and value for money. 11,682 government tenders have been floated on the e-tool, with 2,000 works being awarded annually. With the use of e-tool, qualification review time has now been reduced from average of 45 minutes to maximum of 15 minutes for every bid evaluated. It is innovative and replicable in countries like Bhutan.



# Web-Based Online Evaluation Tool (e-Tool) for Procurement of Works by Royal Government of Bhutan



{This article is an abridged version of the submission on “Web-Based Online Evaluation Tool (e-Tool) for Procurement of Works by Royal Government of Bhutan (Use of ICT, Reform, and Modernization Effort at Systemic and Institutional Level)” made by Mr. Chenchu Tshering, Senior ICT Associate with the Construction Development Board, Thimphu, Bhutan, for the South Asia Procurement Innovation Awards.}



## Summary

Construction Industry is Bhutan’s growth engine, contributing 15% to the nation’s GDP. The Royal Government of Bhutan annually spends almost 60% of its budget on infrastructure development and procurement of works. As part of “Accelerating Bhutan’s Socio-Economic Development” in different sectors, the Royal Government introduced a point-based system and evaluation software to finalize contractors for works above Nu. 4 million. Accordingly, database has been developed by Bhutan’s Construction Development Board (CDB) to evaluate the contractors’ profile based on their

turnover, their human resources, equipments owned, and record of their past works.

Introduction of this web-based online evaluation tool has to a great extent achieved uniformity in application of the point-based system and standardization in bidding for works, which is in line with the overall objectives of the Royal Government Procurement Rules. World Bank has also reviewed this system and recommended that the system is good enough for projects worth 1 Million USD (Nu. 65 Million). Most of the large works in Bhutan fall in the range Nu. 15 million to 70 million.

The reform has increased Large Class Contractors from 66 in June 2011 to 219 incorporated companies as of 15th December 2017.

11,682 government tenders were floated on the e-tool and 2,000 works were awarded in the year to the tune Nu. 54 million.

The e-tool has reduced evaluation time from an average of 45 minutes to maximum of 15 minutes for every bid evaluated, thereby saving 8,000 working hours indirectly.

Today, more than 250 procuring agencies, including state-owned corporations and NGOs are using the system.

## Background

Owing to the massive costs involved, the Royal Government felt the need for reforms in its Procurement System. It entrusted this task to the Ministry of Works and Human Settlement (MoWHS), Ministry of Finance (MoF), and Construction Development Board (CDB). The reforms focused on: 1. Evaluation/selection method of bidders during bid evaluation, 2. Incentives for bidders, 3. Contractor registration and classification system, 4. Performance ratings of contractors, and 4. Development of evaluation software to expedite the evaluation process by government procurement agencies. The reforms led to development of the point-based online evaluation tool (e-tool), which is directly linked to the contractors' profile/database maintained by CDB.

## Challenges Addressed

The point-based system for selecting contractors for construction projects costing more than Nu. 4 Million is used by all government procuring agencies, including corporations and NGOs, who are outside the preview of

the government procurement rules. The CDB Database is integrated with other stakeholders, like Royal Civil Service Commission, Road Safety and Transport Authority, and Department of Civil Registration and Census. This helps validate and authenticate the CVs of key personnel and ownership of equipments owned and proposed by the bidders/contractors during the bidding process. It helps check duplication of same resources in different projects. This ensures that the work is awarded to contractors who have more bid capacity and resources. It also limits the number of works for each contractor as per the work ceiling approved by CDB.

The points/score for evaluation parameters, like the similar work experiences, bid capacity, and past performance ratings, are automatically generated by the e-tool from the contractors' profile/database, thereby saving time for evaluation team and avoiding fabricated experience certificates. For contractors, the e-tool and CDB website provides single



window services for all work-related tenders. For government, it has brought in more bidders, increased competition, and has checked collusion among bidders.

## Impacts Generated

The reform in the Contractors' Registration System, like direct entry to Higher Class, has increased the number of Large Class Contractors from 66 in June 2011 to 219 incorporated companies as of 15th December 2017, resulting in increased competition and value for money. 11,682 government tenders were floated on the

management and policy intervention. Today, more than 250 procuring agencies, including state-owned corporations and NGOs are using the system.

## Level of Innovation

The introduction of e-tool and point-based scoring system has decreased the subjectivity involved in evaluation. Confidence among bidders and contractors has thus increased, as there is less human element in evaluation. Bidders need not submit their past



e-tool and 2,000 works awarded in the year to the tune Nu. 54 million. The e-tool has reduced evaluation time from an average of 45 minutes to maximum of 15 minutes for every bid evaluated, thereby saving 8,000 working hours indirectly. Further, the procedure of recording and updating the Past Performance Rating of contractors on e-tool has had a positive impact, as it has become the basis for research in improving the construction industry and procurement process at large. The rating information provides the lists of performing and non-performing contractors, and sector-wise cost and time overrun of projects. This helps policy makers and project managers in

performance, annual turnover, and similar work experience certificates; or worry about fabricated certificates, as all information is automatically pulled from the contractors' database. The web-based centralized database and evaluation system provides for easy verification by all procuring agencies and fulfills the CDB's mandate.

## Scalability and Sustainability

Any government agency can adopt the point-based system in whole or with little modification in the parameters. In case there are any changes in SBD

and Procurement rules, the e-tool has provision to modify or adjust the scoring pattern for different parameters of evaluation, like bid capacity, performance ratings, credit lines, work experience, HR, and equipment scores. The system can also produce data, like the numbers of works awarded each year by every ministry, department, district, or municipality. Further, it can project the actual number of ongoing projects in one location. This gives a clear picture as to which district is getting more development activities.

### **Lessons Learned**

In the initial phase, e-tool users faced difficulties, as they had to evaluate bid documents submitted by bidders physically.

At times, it was very difficult to determine the authenticity of documents. But now, data on human resources and equipments of winning bidders are locked in the e-tool on award of the work.

This avoids duplication and misuse of same resources in different projects.

There is a high chance of e-tool users of procuring agencies colluding with bidders and manipulating data.

To fix accountability and track the activity of e-tool users, an audit trail feature has also been developed to prevent misuse/manipulation of information.

The audit trail has become a deterrent for e-tool users, who may indulge in corrupt practices.

The need for data integration and reliable internet connectivity is, however, a necessity.

This has been resolved to a great extent by making e-tool web services available through the stable government intranet (T-WAN), since most of the users are government agencies requiring data integration with relevant stake holders.







## Citation

The GNH Model of Procurement of works that ensures Social, Economic, and Environmental Sustainability in Bhutan wins the Runner-Up Award for linking Gross National Happiness (GNH) to community contracting, and putting local communities in charge of their projects. The impact assessment shows that in case of 95% of 205 gewogs, administration officials found that community contracting creates a greater impact on developing the living standard of the rural people in Bhutan. Along with the enhanced ownership of assets created in 205 gewogs, works have been completed at lower costs and in lesser time; leading to overall improvement in employment and income levels of rural labor and contributing to the GNH principles.



# GNH Model for Procurement of Works that Ensures Social, Economic, and Environmental Sustainability – Case Study on Successful Community Contracting in Bhutan



{This article is an abridged version of the submission on “GNH Model for Procurement of Works that Ensure Social, Economic, and Environmental Sustainability – Case Study Based on a Successful Story about Community Contracting in Bhutan” made by Mr. Pema Wangchuk, Associate Lecturer with Jigme Namgyel Engineering College, Dewathang, S.J, Bhutan, for the South Asia Procurement Innovation Awards.}



## Summary

GNH (Gross National Happiness) Model of Community Contracting in Bhutan has successfully safeguarded social, economic, and environmental sustainability in Bhutan. This case study points to the relationship between happiness and development in Bhutan through procurement in accordance with Gross National Happiness principles, guidelines and rules. Around 90% of the kingdom’s developmental activities are associated with infrastructure development through community

contracting at the level of gewog (block or a group of villages) and chiwog (administrative levels below gewog). The case study proves that GNH principles can coexist with development and progress, and community contracting has a greater impact on improving living standards of the rural people in Bhutan. The study concludes with justifications for adopting the GNH Model of Procurement in Bhutan as a Development Tool.

- | Costs of community contracting are significantly lower.
- | A high proportion of community contract costs are used to pay local labor and for local materials.
- | The community benefits directly from additional income, thereby contributing to Gross National Happiness.
- | Local communities have an incentive in implementing works of a high quality because they are the beneficiaries.

## Background

All five-year plans for development of infrastructure in Bhutan have been implemented mostly at local levels owing to the Royal Government's priorities. Though there have been significant increases in investments on infrastructure development of the country, finding contractors to carry out works, especially in remote areas, has been difficult, leading to increase in cost as well as delays in implementation of planned activities. Therefore, the Bhutan Administration has decided on an alternative procurement of works at local level, with "Community Contracting Protocol" addressing all hassles encountered so far.

## Challenges Addressed

One of the most important challenges is to ensure that local development progresses in accordance with Gross National Happiness policies and guidelines. Accordingly, a Community Contracting Protocol has been circulated by the Ministry of Home and Cultural Affairs (MOHCA), Bhutan. The main advantage of this

protocol is that community contracting encourages local communities of the country's mostly hilly and forest regions to assume ownership of their development project outputs. More so, community contracting suits remote areas, where commercial contractors are unwilling to work. Such contracting allows local communities flexibility in deciding for themselves the appropriate mix of paid and unpaid (voluntary) labor.



## Impacts Generated

The advantages enshrined in the Community Contracting Protocol are:

- Costs of community contracting are often significantly lower than those of commercial contracts;
- A high proportion of community contract costs are used to pay local labor and for local materials. So, the community benefits directly from additional income, thereby contributing to Gross National Happiness;

- Community contracting is an effective means of mobilizing community labor and ensuring that works are completed on time;
- Local communities have an incentive in implementing works of a high quality because they are the beneficiaries of these works.

## Level of Innovation

The GNH Community Contracting Model enshrined in Bhutan's sacred Constitution stipulates that "The State shall strive to promote those conditions that enable the



pursuit of Gross National Happiness." The Dzongkhag Tshogdu (District Councils) and Gewog Tshogde (Block Councils) have the autonomy in formulating Five Year Plans and Annual Plans for their Dzongkhag and Gewog. Moreover, these councils monitor and evaluate development policies, plans, and projects, as per procedures formulated by the Gross National Happiness Commission. Similarly, all local governments of the country's 20 districts and 205 gewogs execute their annual plans in line with GNH guidelines to promote national goals, that is: "To fulfill the wellbeing of citizens together with development."

As a result, unlike other nations, Bhutan focuses every socio-economic development on value creation, starting from the grass root level and depending on needs of the local people. While doing so, the maximum participation of people is always ensured and maintained. Around 90% of developmental activities are associated with infrastructure development at gewog and chiwog levels, which include maintenance of farm roads, irrigation channels, drinking water supply, construction of farm houses, maintenance of schools, RNR centers, BHUs, and ORC buildings, and other essential infrastructure

development. The annual budget for most of these activities is from the Gewog Development Grant (GDG).

## Replicability

A few gewogs in Bhutan, which have successfully implemented the community contracting approach over the last couple of years, are Kana in Dagara District, Kabjisa in Punakha District and Bidung in Trashigang District. Kana Gewog is one of the remote gewogs in Dagara. It majorly benefited with construction of a new farm road, while Kabjisa and Bidung

gained from maintenance works and constructions of useful farm houses for farmers. All these were executed in 2016-17 by their own people after forming an association or a small group. According to Choiku Gyeltshen, the Gewog Administrator Officer, Kana Gewog, budget for construction of new farm roads were allocated from GDG and works were carried out by the local people themselves through community contracting.

## Scalability and Sustainability

Socio-economic development and sustainability is one of the main pillars of Bhutan's Gross National Happiness. This principle makes all development processes in Bhutan sustainable and vibrant. All stakeholders, who involve in community contracting as committee members, must uphold directions of the GNHC (Gross National Happiness Commission) as well as the following objectives of GNHC:

- To guide long-term sustainable socio-economic development and strategies;
- To ensure that GNH principles are mainstreamed into plans and policies in line with regional and international commitments;
- To mobilize adequate resources on a timely basis and ensure equitable and efficient allocation; and
- To monitor, facilitate, and coordinate implementation of policies, plans, and programs, thereby ensuring effective delivery.

The gewog budget is sustainable because every year the Government of Bhutan allocates Nu. 2 million fund in the form of GDG to all 205 gewogs in Bhutan. When it comes to preservation of environment, the Bhutanese Constitution mandates for around 60% of forest cover at all times to come in Bhutan. Therefore, local authorities remain aware that preservation of the forest is to be always prioritized, despite developmental activities at their village level.

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## Lessons Learned

The case study has shown that community contracting in Bhutan does bring a rapid revolution in the field of procurement of works, thereby ensuring socio-economic development, sustainability, and preservation of environment. GNH model in procurement of works at local levels is viable and lucrative in various parts of gewogs and chiwogs, with massive benefits, such as:

- Encouragement of local community to assume ownership of project outputs;
- Costs of community contracting often being significantly lower than for commercial contracts; and
- A high proportion of community contract costs are used to pay local labor and for local materials, so the community benefits directly from additional income.





## Citation

This submission from Energy Efficiency Services Limited (EESL), selected as the Winner for India, is about how a business model developed around procurement-led market interventions has brought transformation in terms of bringing in standards for performance, quality standards, and production of LED bulbs, energy-efficient pump sets, energy-efficient fans, etc. thus promoting the environmental objectives of the Government of India. EESL achieved this through aggregating demand and supply for energy efficient products as part of the national programs in these areas. Moving from a compliance-focused procurement approach, EESL's innovative market-led procurement approach ensures values for all stakeholders, including consumers, bidders/industry, as well as the country at large in energy efficiency. The intervention is mainly based on policy decisions for promoting energy-efficient lighting in public places. This has led to a massive swelling of demand for bulbs in the country, which allowed bringing in of newer and mass-scale economic technologies for production. EESL used their regulatory position for demand consolidation and the illustrated unit price of INR 350 (\$6), discovered through bidding for 700,000 LED bulbs in 2014, corrected to INR 38 (60 cents) by consolidating and offering a quantity of multiple tranches of 50 million LED bulbs by 2017. This benefit has percolated down even to private



citizens for their personal use, as the intervention changed the dynamics of production and pricing technologies in the country. EESL, with its mandate to promote the use of energy-efficient technologies in the country, is bringing in such changes in other products, like Energy-Efficient Pump Sets, Energy-Efficient Fans, Electric Vehicles, etc. Recognizing these efforts towards a low emission-economy focusing on energy-efficiency programs, the Global Environment Facility (GEF) has now partnered with EESL for the project – Creating and Sustaining Markets for Energy Efficiency. This is a great example of public procurement delivering value for sustainability and development objectives of a country. Power of procurement in consolidating and driving product development, and mass-scale production benefitting public as well as private individuals, is a great innovation.

# Unlocking Energy Efficiency Market in India – Through Innovative Procurement Business Model



{This article is an abridged version of the submission on “Unlocking Energy Efficiency Market in India – Through Innovative Procurement Business Model” made by Mr. Rajneesh Rana, General Manager, Energy Efficiency Services Limited, Noida, Uttar Pradesh, India, for the South Asia Procurement Innovation Awards.}



## Summary

Energy Efficiency Services Limited (EESL), through its innovative, transparent, and fast procurement-based business model of consolidating demand for products, is promoting the environmental sustainability goals of the Government. The business model is also helping in market transformation in terms of pricing and production of energy-efficient products in India. With its mandate of conceptualizing and implementing country-wide programs that promote use of energy-efficient products to meet the country's sustainable development goals, EESL's business model, focusing

on procurement, is setting the roadmap for making energy efficiency more accessible and affordable in India, without imposing any subsidy burden on the government. By implementing UJALA (Unnat Jyoti by Affordable LEDs and Appliances for All) and various other energy-efficiency programs, EESL has tremendously reduced the burden of energy bills on the country's people and organizations.

By aggregating demand through the program, EESL could present the volumes required as ten times or more in a single lot of procurement for LED (Light Emitting

Common household consumers using LED bulbs save about Rs. 272, which is almost 90% reduction in their electricity bills.

Reduced their energy bills by 50%, while also decreased the peak demand and carbon-di-oxide emissions.

2,000 agricultural pump sets have been replaced by energy-efficient ones.

Investment in infrastructure improvement, distribution network, and logistics improvement, among others, also provides indirect job opportunities.

Diode) bulbs that led to reduction in prices of energy-efficient appliances, like LED bulbs, by 70–80%. In 2014, market price of 7W LED bulb was Rs. 550. In 2017, its discovered price in UJALA tenders fell from Rs. 310 in 2014 to Rs 38 in 2017, while its Lumen/Watt quality at the same time increased from 70 Lumens to 110 Lumens. More importantly, use of LED bulbs has reduced the power bill of average households by almost 90%. Likewise, Solar PV (Photovoltaic)-based agricultural pump sets have enabled farmers save 30% on their farming operations, thereby increasing their income. The revolutionary change brought in by EESL has led to replication of its ESCO (Energy Service Company) model in other countries, including Malaysia, Kingdom of Saudi Arabia, and the United Kingdom.

## Background

The success of ESCO Service business model is owing to its efficient procurement strategies. In this model, EESL invests the complete amount in a project upfront, i.e. equity of 20% and debt 80%. The cost is recovered from the client through annuities in

a time frame of 7–10 years. Due to effective planning, demand forecasting, and 5Rs of Procurement (Right source, Right time, Right quality, Right quantity, and Right time), EESL is able to leverage demand aggregation and economies of scale. EESL has reached the masses by distributing 280 Million LED bulbs since the inception of UJALA in 2014. Similar has been the performance of SLNP (Street Light National Program – LED street lights), Energy-Efficient (EE) agricultural pump sets, and EE fan distribution programs, which have, in turn, accelerated the growth of domestic industries. EESL has thus created a new normal through large-scale transformation, helping consumers get more with the same energy consumption while boosting industrial growth.

## Challenges Addressed

With every program, EESL had faced a number of challenges in the form of:

1. Timely and speedy procurement, along with ensuring delivery on a scale



unseen before, 2. Ensuring the quality of appliances and meeting industry standards, 3. Compliance with various processes of public procurement. 4. Creating awareness about the benefits of energy-efficiency interventions through innovative marketing campaigns, and 5. Enhancing the capacity of Indian industries in making large-scale deliveries without compromising on quality of products. EESL addressed these challenges through numerous ways. To ensure transparent, timely, and speedy procurement, EESL switched from manual tendering to e-tendering method in 2015. With regard to quality of appliances, it

stakeholders, including consumers, industry, and the country at large. 1. Common household consumers using LED bulbs save about Rs. 272, which is almost 90% reduction in their electricity bills. Switching to energy-efficient fans and ACs under EESL programs reduces these bills further. These savings can be utilized by households in meeting their daily expenses, educating children, health care and so on. 2. Likewise, municipalities and panchayats (village-level bodies) have reduced their energy bills by 50%, while also decreasing the peak demand and carbon-di-oxide emissions. 3. Till date, 2,000 agricultural



asked participating bidders to provide test reports from National Accreditation Board of Laboratories. EESL's e-tendering portal has the certification of STQC (Standardization Testing and Quality Certification), an apex body of the Government of India for quality standards. The portal's audit, conducted by a multilateral bank, has found that EESL's tendering process is in compliance with international standards.

## Impacts Generated

EESL innovative market-led business approach ensures value for all

pump sets have been replaced by energy-efficient ones in Karnataka and 1 lakh pump sets are being replaced in AP, leading to farmers saving 30% on their energy bills. 4. EESL has played an instrumental role in developing the Indian industry related to LEDs, agricultural pump sets, solar energy, energy audit, electric vehicles, smart metering and so on. 5. Investment in infrastructure improvement, distribution network, and logistics improvement, among others, also provides indirect job opportunities.

## Level of Innovation

Globally, public sector has been traditionally used to subsidies for making transformative solutions affordable. But EESL's approach uses the novel business model of no subsidy and Pay-As-You-Save (PAYS). PAYS model obviates the need for any upfront capital investment. Further, the organization's approach to aggregate demand makes the market attractive enough for industry. For example, before EESL's intervention in 2014, penetration of LEDs in domestic market was 0.1%. After successful implementation of the Demand Aggregation model, this increased to 20% in 2017. Production of LED bulbs has increased to about 4 crores/month from 10 lakh two years ago. EESL has evolved a Service Model to enable municipalities to replace conventional street lights with LEDs at no upfront cost. The cost is recovered by monetizing energy savings.

## Replicability

The success of EESL's energy service model has created a blueprint for commercial growth of companies in the Indian energy-efficiency space. The model is now being replicated to transform electric mobility, smart metering, energy-efficient agricultural pump sets, and solar roof-top programs in the country. The agricultural pump sets program faced many challenges since farmers are getting electricity free of cost in many states and thus see no advantage. EESL has mitigated this challenge by creating awareness and convincing farmers about the increase in flow of water by adopting scientific method of pump selection. The success of UJALA scheme has led to its replication in Malaysia's Maleka. UJALA is being implemented in UK too. The Kingdom of Saudi Arabia has sought collaboration with EESL to replicate India's successful domestic and street lighting programs.

## Scalability and Sustainability

Through the India Energy Efficiency Scale-Up Program, the World Bank is supporting EESL in scaling up its priority initiatives with regard to energy savings in residential and public sector. What adds to the sustainability of EESL initiatives is running of its programs on a market-led approach, rather than the traditional approach of incentives and subsidies. With the Government of India envisaging transformation in many new areas to fulfill its commitment of reducing CO2 emissions and switching to cleaner fuel options, EESL is planning an Electric Vehicle program, along with charging infrastructure in India. The National Electric Mobility Mission Plan seeks to have 400,000 Electric Vehicles (EVs) on Indian streets by 2020. Recognizing India's efforts towards a low-emission economy, the Global Environment Facility (GEF) has now partnered with EESL for Creating and Sustaining Markets for Energy Efficiency. The project will receive a composite funding of \$ 454 million. EESL's efforts have been appreciated and recognized at international platforms, with World Bank President, Dr. Jim Yong Kim, making a mention about it at the climate change event in Paris. Early next year, EESL will use a USD 220 million World Bank loan, combined with an 80 million dollar guarantee facility, and leverage \$ 200 million of commercial finance, to deploy thousands of electric cars and charging stations and millions of smart electricity-consumption meters throughout India.

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### Lessons Learned

Conceiving a project on paper is far easier than taking the same to execution on the ground level with economic viability.

Some of the programs announced by EESL in initial years were not able to gather enough attention from the manufacturer and consumer side.

By organizing industry awareness programs, elaborate pre-bid meetings, and accommodating as many suggestions received from the industry, EESL has created a positive environment for competition and ensured maximum participation.

Majority of its tenders are being wrapped up in 45 days, with well thought of payment terms reinforcing active participation by prospective bidders.





## Citation

Government e-Procurement System of National Informatics Centre – GePNIC, which bags the Winner Award from India, has been in place in India for the last 10 years and is offering seamless e-procurement service to 27 federal states and 350 other large public sector entities. The system has features like Authenticity – Mandatory use of Digital Signature Certificates, digital signing of all documents, two factor authentication, secured hosting, client-side encryption, multiple bid openers; 24 x 7 availability of portal and telephonic help desk, anytime and anywhere bidding, periodic SMS and mail alerts; mobile apps, online tender opening, online payment and automatic refund in a user-friendly system, system-aided evaluation process, on-the-fly reports / comparative statements, etc. Over the years, NIC has been deepening its reach and widening the depth, as required by each organization. Variations of the base system can now boast an integrated solution with e-tendering, e-reverse auction, and e-auction, as delivered to some of the public sector undertakings. This adaptability and resilience of



the system to run over 100,000 bids a year makes it a winner. This may be one of the very few e-procurement systems developed fully in house by any government department, which has a reach as wide as the length and breadth of India. Customized provisions, like integration with mobile technology, state/country-wide single registration of vendors for repeated participation in bidding, ability to integrate with other enterprise management systems, logistics and warehouse management systems, FMIS, etc. make GePNIC a continuously evolving and futuristic technology solution for good governance.



{This article is an abridged version of the submission on “Government e-Procurement System of National Informatics Centre – GePNIC” made by Mr. Srinivasa Raghavan K, Scientist F, National Informatics Centre, Chennai, India, for the South Asia Procurement Innovation Awards.}



## Summary

The Central Public Procurement Portal of Government of India is a single-point access for information on all procurements by various central government organizations and state government entities across the country. It facilitates electronic or e-tendering using the Government e-Procurement System of National Informatics Centre (GePNIC). Over 350 Central Government organizations, apart from 27 state governments and union territories are using GePNIC, which is also available on mobile phones with apps downloadable

from Google Play or Apple stores. More than 2.7 million e-tenders worth over Rs. 402 trillion have been processed since the inception of GePNIC. The system, designed taking into account the procurement rules followed by India is customizable for the procedures followed by the World Bank, and Asian Development Bank, etc. It has features like mandatory use of Digital Signature Certificates, digital signing of all documents, two factor authentication, secured hosting, client-side encryption, multiple bid openers; 24 x 7 availability of portal and telephonic help desk, anytime and anywhere bidding,

Centralized Information as all tenders of the country are assimilated in one portal.

Organizations indicated huge savings in time and cost.

Availability of step-by-step details of the tender life in public domain ensures complete transparency.

A single product used by various organizations ensures uniformity in the tender process.

periodic SMS and mail alerts; mobile apps, online tender opening, online payment, and automatic refund in a user-friendly system; system-aided evaluation process, and on-the-fly reports / comparative statements.. Even with such a large user base and national outreach, NIC is providing individualized value additions as needed by various procurement entities including integration of e-procurement with ERP systems; end to end solution including online evaluation and contract management; electronic money transfer for bid security etc. This adaptability and evolving nature of features with such a wide outreach makes GePNIC a living innovation.

## Background

GePNIC has been developed by National Informatics Centre (NIC) of the Ministry of Electronics and Information Technology (MeitY), Government of India, to cater to the electronic procurement / tendering requirements of Government departments and organizations. The tendering process is fully automated,

which makes the process of evaluating a tender unbiased and cuts short the time required for awarding contracts. Variations made within the base system provide an integrated solution with e-tendering, e-reverse auction, and e-auction, as delivered to some of the public sector undertakings. This is a significant step in managing large procurements without any litigation. Tender-cum-auction process using GePNIC enables competitive bidding and has brought in lots of revenue for the government in sand mining and other tenders. As a result, the process is being followed by various other organizations across the country, leading to an increase in their revenue share too.

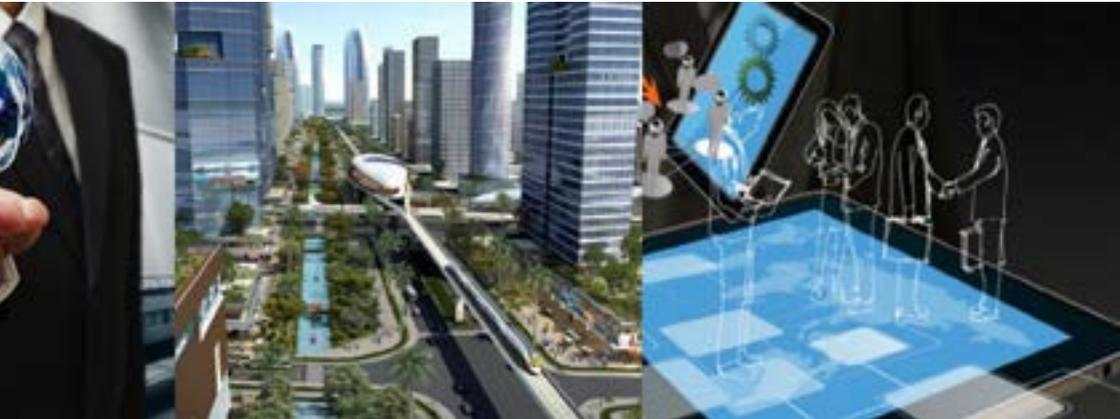
## Challenges Addressed

As per a World Bank report, the overall procurement within India is 13% of its National Budget. Earlier, the government carried out procurement



through conventional methodology, investing huge human and other resources and consuming a lot of time, with little or no transparency. Mandatory adoption of the electronic medium for tendering with state-of-the-art security has ensured ample transparency and accountability by various stakeholders. Major challenges addressed by GePNIC through process reengineering and emulating best practices are adoption of standard bidding document, price bid templates, and directories on bidders, products, and locations. Front-end computer systems with necessary network connectivity, accessories, power backup facility, and back-end systems

2. Time and Cost Savings: Studies conducted by various organizations have indicated huge savings in time and cost.
3. Transparency: Availability of step-by-step details of the tender life in public domain ensures complete transparency. This has instilled faith and confidence amongst all stakeholders.
4. Uniformity in Tendering Process: As this is a single product used by various organizations, there is uniformity in the tender process followed. Workflow-based system



having necessary capacity meet all the user requirements. Predictive analytics is planned to be included once base analysis is made available on the portal. Adaptability and resilience of the system to run over 100,000 bids a year has made the system a winner.

## Impacts Generated

GePNIC has generated considerable impact by way of:

1. Centralized Information at One Point: All tenders of the country are assimilated into one portal.

ensures that no step of the tendering process can be circumvented.

5. Authenticity: Mandatory use of digital signature certificates, digital signing of all documents, two-factor authentication, secured hosting, and client-side encryption have ensured the authenticity of each task performed.
6. Bidder Convenience: The system is available 24 x 7 with help desk. This enables anytime and anywhere bidding with no physical threat; allowing fair, free, and fearless participation from vendors.

7. Data Assimilation and Analytics: This provides real-time graphs, trends, and statistics. Many new entrepreneurs have thus got encouraged to participate in e-tendering under Government of India's Make in India vision.

## Level of Innovation

When work on GePNIC was taken up, there was no readymade system available, which could meet the varied requirements. Hence, NIC decided on development of the system addressing all requirements and overcoming every challenge. This led to many innovations like a) Mobile Apps, which enabled tendering and updates on the go. b) A Dash Board that provides descriptive analysis and key performance indicators on various parameters. This facilitates a detailed insight into various activities taking place within the system. c) Process innovation that facilitates quick bid opening, thereby ensuring quick and instant results. All documents uploaded are digitally signed and backed by the IT Act of Government of India. There are audit logs, time stamping, and role-based access with tamper-proof methodology. d) As suggested by the World Bank after a study across different states, product categories have been made uniform. There is a standard yard stick for similar works across various portals.

Provisioning of configurable functionalities has made GePNIC more versatile. Customized provisions, like integration with mobile technology, state/country-wide single registration of vendors for repeated participation in bidding, ability to integrate with other enterprise management systems, logistics and warehouse management systems, and Financial Management Information System (FMIS), among others, make GePNIC a continuously evolving and futuristic technology solution for good governance. The mobile interface adds to the system's openness and transparency.

## Replicability

e-Procurement system of NIC has been developed as a generic product, which makes it replicable for all kinds of procurement needs of government offices in the country, whether Goods, Services or Works. As it is on an Open Architecture Framework, there is flexibility for scaling up and meeting the dynamic needs of the Government. Further, it has been designed taking into account the General Financial Rules (GFR) on tendering and, thus, adheres to various guidelines issued by the World Bank and Asian Development Bank. Some of the processes are deployed on Virtual Machines / Cloud to cater to the requirements of peak time load and other such critical resource-intensive activities. With such capabilities, GePNIC can also be implemented initially in SAARC countries, followed by other nations.

## Scalability and Sustainability

Various methods have been adopted for funding and sustainability of the system.

1. Certain State Governments have a process of registering bidders for a specified period, for which a nominal one-time fee is collected from bidders. This brings in continuous revenue without overburdening the bidder on the cost aspect.

2. For each bid, a small percentage on the bid value is collected for maintaining the system and meeting other requirements. However, this may overburden bidders.
3. The Earnest Money deposit (EMD) collected from bidders is deposited in banks. The interest earned during the deposit period is used for sustainability of the system. This does not have a direct impact on bidders' costs. These measures have been running for more than 10 years in certain instances, confirming the sustainability of the system.

## Lessons Learned

Major learnings from implementation of GePNIC across the country can be summarized as follows:

- The system, driven from the top, has had a great impact on the speed at which it is being implemented.
- Bidders are able to bid on any site without relearning, as the product is the same all over.
- e-Procurement systems have a standardized approach to rolling out efficient processes. They serve not only the needs of procurement, but also all departments involved in processing and record keeping of various transactions.
- There must be in place a Core Committee or some such empowered decision-making body to take quick decisions on issues that may arise.
- Continuous process re-engineering is essential for value addition.
- Constant capacity-building measures have to be put in place.
- Key to successful and continued running of GePNIC is creating a strong support structure comprising help desks, system administrators, and IT support.
- Technology improvements by way of better performance, and enhanced features, like Mobile Apps and Data Analytics, will be very useful for end users.
- Item codification and standardization of bidder categories are also essential.
- Multi-currency templates are required for global tenders.





## Citation

A Public Private Partnership (PPP) contract for diagnostic services in rural and urban areas of Uttar Pradesh, engaging high-end private diagnostic labs with a performance-based contract system, wherein performance is evaluated on the basis of Turnaround Time (TAT) calculated starting from the time sample is taken from the patient up to successfully uploading the test result on the website of Patients Diagnostic Information System owned by UP Health System Strengthening Project (UPHSSP), is a successful innovation in health service delivery and gets the Runner-Up Award for India. UPHSSP has also hired an External Quality Assurance Agency (BIO-RAD) to do monthly audit and maintain quality standards of the equipment of service providers. The number of patients increased from 11,314 (Dec 2015) to 1,369,864 (Dec 2017), and they benefited from a range of 173



tests. By a careful packaging of cluster of districts for PPP bidding, the rates offered have been an average of 20% below the Central Government Health Service's rate. Over 90% patients reported higher levels of satisfaction with regard to services provided. The results from the intervention have triggered its replication across the state and the model has been adopted by National Health Mission, Government of India.

# Public Private Partnership for Laboratory Services in Public Hospitals of Uttar Pradesh with Innovative Web-Enabled Verification Mechanisms



{This article is an abridged version of the submission on “An Evidence from Uttar Pradesh on Public Private Partnership for Laboratory Services in Public Hospitals” made by Ms. V Hekali Zhimomi, Project Director, UP Health System Strengthening Project, Lucknow, Uttar Pradesh, India, for the South Asia Procurement Innovation Awards.}



## Summary

Uttar Pradesh, the largest state/province in India, had substantially low hospitalization rates in its public hospitals when compared to the national average. The key reason for this was found to be lack of availability and accessibility to laboratory services in the state's 52 district hospitals. According to the National Sample Survey Organization, diagnostic services accounted for 14% and 15.4% of Out-of-Pocket expenditure at public facilities in rural and urban areas of UP. A study conducted by UP Health System Strengthening Project (UPHSSP) revealed that 21%, or a fifth of the patients,

would not visit a hospital but remain at home, owing to such costs involved. Having identified the potential gaps in public health care facilities of the state, the UPHSSP, in consultation with the World Bank, introduced an innovative and brand new concept of establishing high-end private diagnostic labs within the premises of public hospitals in UP under the Public Private Partnership (PPP) mode. The innovation has had an enormous impact. A proof of this is increase in the number of patients at these hospitals from 11,314 (December 2015) to 1,369,864 (December 2017).

Increase in patients availing quality diagnostic services in high-end laboratories within hospital premises from 11,314 in Dec. 2015 to 1,369,864 in Dec. 2017.

90% patients were satisfied with getting their lab reports on time.

Rates quoted during competitive bidding were at an average 20% below the rates stipulated by the Central Government.

Test results are available online.

## Background

With a population of 199.8 million (2011 Census), Uttar Pradesh, if considered a country, will be the fifth most populous nation on the globe. Given such enormous population density, UP will play a crucial role in achieving India's health-related Millennium Development Goals. The engagement of high-end private labs under the PPP model, the first-of-its-kind performance-based contract system in UP, will go a long way in achieving the millennium goals. Care has been taken to evaluate the performance of these diagnostic labs on the basis of Quality and Turnaround Time (TAT). The TAT is calculated starting from the time sample is taken from a patient to successful uploading of the test result on the website of Patients' Diagnostic Information System (PDIS). An external quality assurance agency conducts monthly audits to ensure accurate test results, indicating better diagnosis and treatment planning. Engaging 6 well-established private diagnostic labs in such a manner has ensured that underprivileged communities in Uttar Pradesh have access to high-end pathology lab services.

## Challenges Addressed

Some of the challenges that required UPHSSP's attention are 1. Poor Public Health System: Overall per-capita spending on health is very low (Rs. 372), indicating a capacity deficit within the government-run secondary care hospitals to provide affordable and quality laboratory services. Therefore, high-end laboratory services have been introduced at district government hospitals to provide quality services at no cost to the patients, resulting in much better diagnosis and treatment of patients. 2. Out-of-Pocket Expenditure: 8% of households in the state fall below the poverty line compared to the national average of 6.2%. Lack of quality pathological lab services in government hospitals forced patients to avail these services from private service providers at very high rates. Now, with establishment of high-end laboratory centers within the hospital premises, patients get quality diagnostic services at no additional cost, which has significantly reduced their out-of-pocket expenditure burden.



3. **Effective Monitoring:** A simple and efficient monitoring system has been developed, where each hospital and doctors are assigned a unique code. These codes help in tracking each lab test referrals from across the state on real-time basis.

## Impacts Generated

The UPHSSP project has achieved many quantitative milestones and has had an impact that is cost effective for patients as well as government.

bidding were at an average 20% below the rates stipulated by the Central Government Health Scheme (CGHS). The present running cost of a high-end test is Rs. 463 per patient, which the government reimburses to the private player.

3. Test results are also available online. Access through a login ID ensures privacy. The result comes on specially designed software PDIS, which is available on the UPHSSP website.



Some of the major impacts are:

1. There has been a significant increase in the number of patients availing quality diagnostic services in high-end laboratories within the hospital premises from 11,314 in December 2015 to 1,369,864 in December 2017. An internal survey in 9 districts revealed that 90% patients were satisfied with getting their lab reports on time.
2. The intervention is cost effective. The 52 district hospitals were segregated into 11 clusters in such a way that rates quoted during competitive

## Level of Innovation

Implementation of performance-based contract for delivering high-end laboratory services in public health facilities is a first-of-its-kind innovation in Uttar Pradesh. The most innovative parts of the intervention are: cost-effective high-end laboratory facilities, improved and efficient delivery of health services, performance-linked payment, process for patient feedback, online facility for patients to view and generate their reports, and introduction of private sector in the most complex areas of health sector. The intervention has facilitated development of a knowledge

repository that helps understand the disease and health profile of selected districts, which enables tracking of any emerging epidemics. The UPHSS initiative is also equitable and adequately attempts to address the needs of different sections of the society, such as women and poor religious minorities.

## **Replicability**

The system has demonstrated that it is the most viable model, which can be replicated across the state and country. The model has already been adopted by National Health Mission of Uttar Pradesh and scaled up to 95 district hospitals and 822 Community Health Centers (CHC) in the state. As the costs/rates of high-end diagnostic test services are CGHS-based, they are the lowest rate in the country. Thus, the government does not pay a huge amount for these services, which makes easy a policy decision for replication by other governments. The online PDIS software designed for monitoring has been developed on a simple, secured, and open source platform, which is compatible for migration and replication.

## **Scalability and Sustainability**

This innovative public-private partnership model is a win-win situation for all three stakeholders and, hence, scalable and sustainable. Patients are getting quality services, which is their right, free of cost. Pathology labs are getting reimbursement of their service delivery costs from government. And, government provides its people access to high-end pathology lab centers without spending any amount on infrastructure and human resources, but only paying for services at much lower CGHS rates. Labs are able to manage their expenses through higher footfall of patients. Therefore, this performance-based contracting system model has all the potential to become a self-sufficient and sustainable model in other parts of the country and abroad.

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## Lessons Learned

The lessons learned are:

1. Stakeholder consultation is essential for assessing the market – Initially, there was strong resistance within the public sector when it came to involving private players. However, continued consultation with private sector helped it understand market opportunities and the influencing factors in rate negotiations.
2. Cluster approach makes the package more attractive – Given the extensive spread of health facilities in the state, hospitals were divided into 11 clusters covering all 52 hospitals. The concept of clustering ensured cross subsidization and private sector could make profits through increased footfalls.
3. Inclusion of quality parameters for performance-based payment – Many contracts that involve payment on inputs have the risk of compromising on quality. In light of this, the project set up an External Quality Assurance Service (EQAS), which is linked to performance for payment. EQAS evaluates the standardized quality control checks for tests conducted in laboratories to ascertain their actual quality. Only on a satisfactory report, 10% payment linked to the quality parameter is released to the service provider. Similarly, another 10% is released on compliance with timely delivery of test reports to patients.
4. Retaining available services but adding services of high-end pathology not available at the hospital was the key, providing patients an additional benefit at the hospital.





## Citation

e-Council, an integrated procurement and financial management solution developed for managing the challenges of a small country Maldives with decentralized government authorities, 179 Island Councils, 18 Atoll Councils, and 3 City Councils, gets the Winner Award for SAPIA 2017. This is a 'fit for purpose' solution in the context and is innovative, as the portal digitized manual procurement, administrative and financial framework of local councils, and gathered and fed data into a central depository and all other developmental aspects of the local council functioning.

e-Council, as a platform for all decentralized administrative units to manage their financial and procurement matters and link up to central government structures, adds value to governance in the country.





{This article is an abridged version of the submission on “e-Council” made by Mr. Adam Shareef Ahmed, Director General, Local Government Authority, Male, Maldives, for the South Asia Procurement Innovation Awards.}



## Summary

Maldives is an island nation with a population of 400,000, which is geographically scattered over roughly 1,190 islands across the Indian Ocean. The administration of these islands is by Local Councils, which are separate legal entities elected by residents of the respective islands, atolls, and cities. With the Decentralization Act devolving many municipal functions to these Local Councils and their functionaries, there is a need to strengthen their capacity of governance. Hence, a Local Government Authority has been created as a regulatory body for Local Councils to monitor, regulate, and build their capacity. This

authority is working together with line ministries, independent institutions, and other government partners for developing standards, policies, and procedures to strengthen decentralization system in the Maldives. The aim is to promote good governance and transparency at local levels. One of the initiatives has been to develop a web-based system called e-Council to deliver efficient services to the public. The system also strengthens and standardizes the financial and administrative structures of councils as well as procurements made by them.

Possible to digitize manual procurement, in addition to the administrative and financial frameworks of Local Councils.

Creation of a national hub in terms gathering data collected at local levels.

Standardization of the local councils' financial management system towards proper maintenance of data.

Local Councils possess the necessary systematic procurement controls and approvals.

## Background

There are 179 Island Councils, 18 Atoll Councils, and 3 City Councils in the Maldives with a mandate to govern the affairs of their communities. To exercise governance, the e-Council system includes the following modules at the moment:

- Procurement and Finance Module,
- Establishing procurement and financial processes through the electronic system,
- Generating and maintaining different reports,
- Administrative and Statistical modules for all data mandated by the Act,
- Local council registries and projects,
- Monitoring staff and annual work plans,
- Birth, Death, and House Registries, and
- All other statistical data mandated by Act. The e-Council Project also comprises an online platform (E-Filaa) to facilitate

online training. Further, there is a video conferencing system that enables interactions with Local Councils through a single central government network, which connects all councils in the country.

## Challenges Addressed

The key challenge is to change the finance and procurement process of the Maldives as per the newly adopted decentralization system. This mandates reports on revenues, expenses, assets, and liabilities, which effectively become the basis for accounting and accountability. It also implies that the councils prepare their consolidated financial statements that incorporate revenues from the state budget, operating expenses, and revenues and expenses from operations of business activities of the councils. This has led to development of the e-Council Procurement and Finance Module as per the finalized criteria.



## Impacts Generated

The establishment of web-based e-Council system has been an innovative effort in terms of digitizing manual procurement, in addition to the administrative and financial frameworks of Local Councils. This system also addresses another key challenge by becoming a national hub in terms of gathering data collected at local levels. Implementation of such a system has carved new pathways to standardize the local councils' financial management system towards proper maintenance of their ledgers, stocks, and inventories, and involves internal and external

hindered communication flow from local governments to the central government. The advent of e-Council platform has, however, revolutionized procurement and financial processes of the local government organizations at the national level, which is an innovation of its own kind. The new platform has developed new segments of local governance that enable users to exercise all essential controls and help gather reports required for financial management and audit purpose.

In short, the e-Council system is slated to achieve the following objectives:



audits. All Local Councils thus possess the necessary systematic procurement controls and approvals.

## Level of Innovation

During the initial phase, reports required for audit of Local Councils were not properly maintained, as there was no control over procurement and finance management. Due to unmethodical workflow, it was difficult to ensure a transparent and proper procurement process. Lack of standardization was the most pressing issue that had to be resolved, as it affected the workflow of all government organizations. It

- Implementation of consistent and uniform accounting policies across all councils,
- Clarity with respect to transactions and functions of the personnel,
- Processes being in line with the statutory requirements of Public Finance Act, Public Finance Regulation, and IPSAS (International Public Sector Accounting Standards),
- Efficient and accurate accounting transactions with adequate controls in place,
- Process-based approach to identify,

account for, and monitor revenues and costs of Local Councils,

- Robust information management system at council levels, and
- Provision of economic and efficient services to the public.

## **Replicability**

The e-Council system enables small community organizations to enhance their administrative processes at the local level, which would greatly impact administration at the national level. The web-based platform enables all Local Councils to simultaneously work at island, atoll, and city council levels. As the system is on the central government network, there is systemic protection. Furthermore, the system facilitates other stakeholders, such as national organizations and line ministries, in accessing any data or statistics that they require. Foreign agencies can also use the system to provide aid to local government councils.

## **Scalability and Sustainability**

This system facilitates necessary linkages between central and local governments for obtaining the required reports and statistical data in a timely manner. It assists Local Councils in maintaining their accounts in a proper way for audit purpose. The system is designed in a way to provide only the required amount of access to stakeholders, which enables the network to channelize important information as deemed fit. As the system has been developed under the world-wide IPSAS guidelines, it can be used by any other country.

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## Lessons Learned

The e-Council system demands lot of commitment before it can be fully developed, with various modules being incorporated gradually.

Since the global business market and technology is always evolving, it is important to continuously upgrade the system to enhance its efficiency and effectiveness.

However, due to limited skilled manpower and increasing responsibilities caused by devolution, Local Councils are unable to maintain up-to-date records, which make reconciliation and review difficult.

The procurement process has also been weak in terms of adhering to regulations and maintaining proper records. To overcome these hindrances in establishing local governance system in the Maldives, utmost priority is being given to fully understand the existing financial framework and align the local governance system with that of the central government.

Discussions with experts from the field have been carried out and a new local government financial management system has been finalized in collaboration with Ministry of Finance and Treasury, and Auditor General's Office of Maldives.

Furthermore, a separate chart of accounts for local government organizations has been developed, so that they are in alignment with the central government.





## Citation

This submission is selected for the Winner Award from Nepal. A community demand-driven program, targeting enhancement of livelihoods of grass root-level population, annual targets for registration of community organizations, and reaching agreements for income generation and community infrastructure activities for their working area based on program's annual budget, requires rapid assistance in review and appraisal of proposals and time-bound monitoring and evaluation of progress. This submission from Nepal Poverty Alleviation Fund (NPF) presents the innovative strategy of a roster followed for identification, selection, and recruitment of individual consultants for drawing up their time as required; and how such intervention can scale up project implementation. PAF is using this approach for the last seven years. And, appraisals/ monitoring of around 18,000 number of income generation projects and 3,000 number of community infrastructure projects have been done by this system.



# MIS-Driven Roster of Individual Consultants Enabling Achievement of Annual Targets in the Community Project of Nepal's Poverty Alleviation Fund



{This article is an abridged version of the submission on “MIS-Driven Roster of Individual Consultants Enabling Achievement of Annual Targets in Nepal Poverty Alleviation Fund’s Community Project Approvals and Monitoring” made by Mr. Shankar Prasad Yadav, Procurement Consultant, Nepal-India Regional Trade and Transport Project, Ministry of Commerce, Kathmandu, Nepal, for the South Asia Procurement Innovation Awards.}



## Summary

Poverty Alleviation Fund (PAF) is a special and targeted program to bring excluded communities of Nepal into the mainstream of development. The targeted program, started in 2003 in 6 districts, has now expanded to 55 of the total 75 districts. PAF has adopted a demand-led, community-based approach to alleviate poverty, with 33,124 community organizations being registered by the end of 2015-16. The core programs of PAF include income generation and community infrastructure activities as two major demand-driven projects. The main funding agency in this regard is the World Bank. Due to insufficient number

of professionals in the project, individual consultants have to be selected as per WB procurement guidelines. As program coverage has increased, a big challenge is appointing of consultants in time. Thus, PAF program faced difficulties in achieving its annual physical and financial targets. To overcome this, in consultation with World Bank, a roster of individual consultants has been built for timely award of contracts, which supports timely achievement of annual targets.

Innovation of a roster for procurement of individual consultants has led to better implementation of the PAF program.

Procurement Unit is finding sufficient time for implementing other activities as per the procurement plan.

Reduced the cost of advertising the Request for Expression of Interest (REoI).

20-30 people of each roster group find assignments/jobs throughout the year.

## Background

Under the PAF program, poor and disadvantaged groups themselves are placed in the driving seat of development efforts to bring the excluded communities into the mainstream of development. Each Portfolio Manager or District In Charge has an annual target of registering community organizations and signing the agreement for income generation and community infrastructure activities for their districts based on the program's annual budget. The Portfolio Manager seeks supply of individual consultants for project appraisals before registering a community organization and signing an agreement with it for income-generation and community infrastructure projects. In addition, individual consultants have to monitor and evaluate the projects and enter relevant data about the specific project into the PMIS (Project Management Information System).

## Challenges Addressed

Procurement of individual project consultants in the beginning took

about 40 days on average before a contract could be awarded for a single assignment. This led to the following issues: (i) Non-fulfillment of annual physical and financial targets, (ii) Blame game when targets are not achieved, (iii) Wastage of huge amounts in advertisements seeking individual consultants. These issues have, however, been taken care of after PAF authorities, in consultation with the World Bank, took a decision to introduce an innovative roster system for appointing individual consultants. As a result, project consultants are now available for awarding contracts within a week. The innovation has greatly helped in achieving annual targets, reducing administrative costs, and saving time. A single notice in a year seeking individual consultants brings enough of them on the roster and they are given assignments on a rotational basis.



## Impacts Generated

Innovation of a roster for procurement of individual consultants has led to better implementation of the PAF program. The Procurement Unit is also finding sufficient time for implementing other activities as per the procurement plan. One-time evaluation for qualifying individual consultants and preparation of roster for a full fiscal year assists in timely selection of individual consultants for appraisal/ monitoring of income generation and community infrastructure projects and proper data entry into the PMIS. This helps achieve the annual targets of the PAF



program. The innovation has also reduced the cost of advertising the Request for Expression of Interest (REOI) by individual consultants and their evaluation process. About 20-30 people of each roster group find assignments/jobs throughout the year and are able to complete their tasks in close coordination with the Project Coordinator. Hope of getting another assignment after completing the previous one is encouraging individuals in becoming accountable for their task. Disputes are also minimal.

## Level of Innovation

As per guidelines issued to World Bank Borrowers for Selection of Consultants, individual consultants have to be selected on the basis of their qualifications for the assignment. Consultants shall be selected after comparing qualifications of at least three candidates from among those who have expressed their interest in the assignment. There are more than 400 such assignments per package. Thus, the Procurement Committee had to spend a lot of time in choosing individual consultants. Following this

innovation, the Procurement Committee now evaluates consultants only once a year to develop a roster of individual consultants for each category of works.

The roster for each category is prepared by taking the top 20-25 candidates on merit basis. The detailed list of consultants is uploaded in the PMIS (Project Management Information System). Consultants in the merit list are appointed on a top-to-bottom and rotation basis once demand is placed by the Portfolio Manager. After completion of one cycle, the second cycle is again

started from the top rank. On completion of the assignment, the consultant is evaluated based on a report submitted by the Project Coordinator before final payment.

## Replicability

This innovation of roster for individual consultants can be replicated for all community-based projects, where expertise of individual consultants is required. Institutions having lesser knowledge of procurement and contract management too can apply this innovation for appointment of individual consultants. As this innovation is very simple, it can be replicated in any other project of the country or abroad.

## Scalability and Sustainability

PAF has been using this approach for the last seven years. Appraisal/monitoring of around 18,000 income-generation projects and 3,000 community infrastructure projects has been done using this system. Disputes among consultants during contract period in this innovation are minimal. Getting another assignment after completing the previous one encourages individuals to ensure quality and be more accountable for their task. The approach is thus also sustainable.

### Lessons Learned

This innovation has led to cost savings, transparency, and streamlining of the procurement process.

Data-based management system ensures transparency and quick supply of individual consultants on rotational basis.

An orientation program about the assignment for selected consultants can help them focus on their job as per the project requirement.

Evaluation of the job done by the consultant after each assignment ensures that they are sincere with regard to their job.

A Standard Format for Reporting can also be developed for a quick review of reports submitted by the consultants.







## Citation

This submission from KP-Southern Area Development Project on Pointer – a web-based monitoring application, is selected for the Winner Award at country level. Pointer is developed to capture geo-tagged images of physical progress, serving as Eyes for the project, with an added Interactive Voice Response System (in local languages) that provides access to local communities to provide feedback on what is going on in the field, which serves as Ears for the project. Pointer is developed as a web-based tool to track physical progress remotely. 1,189 activities have been tracked using Pointer and around 500 complaints have been reported and resolved using the IVR system, showing the economic value and replicability in similar projects. With a set and recurring cost of about \$6,000 per annum per project, this is a low cost but high-impact innovative solution for contract monitoring, using technology that is suitable to all beneficiary groups. Its wide adaptation in many other projects in Pakistan makes it an innovation that can be replicated and scaled up for better contract management and project delivery.



## Pointer – Eyes and Ears of Project Supervision for KP-Southern Area Development Project



{This article is an abridged version of the submission on “Eyes and Ears of Supervision by Bank Procurement Team for KP-Southern Area Development Project” made by Mr. Ghulam Habib, Project Director, Southern Area Development Project, Dera Ismail Khan, KPK, Pakistan, for the South Asia Procurement Innovation Awards.}



### Summary

Pointer, a web-based application that captures geo-tagged images of works being implemented and an Interactive Voice Response (IVR) system in local languages, allowing resident communities to tell what is going on in the field in KP-Southern Area Development Project in Pakistan’s Khyber-Pakhtunkhwa (KP) province, has turned out to be an effective tool in monitoring projects in this remote and security-sensitive region. Keeping in mind difficulties involved while implementing the KP-Southern Area Development Project (SADP), the Project teams came up with a solution by developing “Eyes and Ears of Supervision”.

This enabled the teams to “listen and see” as to what is actually happening on the field while the development project is being implemented. Pointer has thus proved to be a cost effective and time-efficient solution to ensure completion of tasks and physical existence of activities being implemented under KP-SADP.

### Background

Pointer is a tool developed to capture geo-tagged images of physical progress, which serves as “Eyes” of a project under implementation. It comes with an Interactive Voice Response (IVR) system

- Significantly reduced the turnaround time for resolution of complaints.
- Helped the teams to complete tasks in a timely manner.
- The system has turned into a Citizen Engagement Tool.
- Communities are recording their needs on the field, like requirement of water facility or paving of streets.

available in local languages, which allows resident communities to tell what is going on in the field. This serves as “Ears” for the project. The web-based tool thus remotely tracks the physical progress of any project. It allows the Government agency responsible for implementing the project, to capture geo-tagged images of assets / facilities created under the project, which are then displayed on a GIS-based platform. The images are captured through a smart phone and automatically tagged with the GPS coordinates. This enables sequenced monitoring, as it captures the different phases of the project. For example, the before, during, and after images of a road construction project in Federally Administered Tribal Areas (FATA), or a community shelter in Khyber Pakhtunkhwa (KP), can be uploaded to Pointer, which allows the task team to remotely monitor physical progress. Even something as simple as office furniture procured through Project funds can be included in the Pointer.

## Challenges Addressed

The Project teams were unable to travel to certain project areas,

particularly in FATA and KP, primarily due to security concerns. The resultant travel restrictions constrained periodic field supervision of activities being financed by the Project and Bank teams. Thus, frequent monitoring and validation of the project’s physical progress, particularly projects with a wide geographic span / foot-print, became a challenge. This led to an innovative solution in the form of Pointer, which was utilized to track 1,189 activities. Around 500 complaints were reported and resolved using the IVR system. The system also enabled females in remote areas to access the system directly from their homes. Project and Bank teams could thus get weekly status of the project through calls / complaints received, leading to resolution of the complaints.

## Impacts Generated

The online monitoring of complaints by the Project has significantly reduced the turnaround time for resolution of complaints. Tracking



of physical progress of activities using Pointer has helped the teams to complete tasks in a timely manner and ensure physical existence of the activities being implemented. With time, the system has even turned into a Citizen Engagement Tool, where communities are recording their needs on the field, like requirement of a water facility, paving of streets and so on.

### Level of Innovation

Any good software must respond to the needs of the user. While developing

Pointer system requires merely an understanding of how to make a call. The rest is taken care by the system automatically. The system is multilingual and supports local languages.

### Replicability

The development of Pointer had been for the KP-SADP project. However, the tool also found utility in implementation of the Punjab Land Record Management Information System Project by way of tracking construction of field data centers. The tool also helped implement



Pointer and Interactive Voice Response (IVR) system, it has been ensured that in addition to responding to the needs of Bank teams, requirements of the Government as well as Third Parties are also adequately addressed. The design of functional specifications of Pointer was finalized following several consultations with implementing agencies, private sector, and community beneficiaries. The IVR-based Complaint Redressal Mechanism is an automated system, which can be accessed by anyone from the field dialing from a common phone. This is different from an SMS-based system, which is limited only to people who can read and write messages. The

the Electricity Distribution and Transmission Improvement Project, and Disaster and Climate Resilience Project. Further, the IVR model found replication in the Sindh Agriculture Growth Project for getting feedback from farmers with regard to agricultural equipment supplied to them.

### Scalability and Sustainability

Pointer is on an open source platform. Thus, there is no licensing fee for software. The only expenses are web-hosting charges, which are less than USD 150 per year. Pointer has been

developed in a way that any project, either financed by the Bank or Government, can easily be configured in just a few clicks. Since it has been developed using a web platform, anyone from around the globe can use it to upload images and see the progress. IVR is ported on a toll free number and has a web-based platform. Any new project within Pakistan can easily be ported with some customization in voice menu. There are though subscription charges of approximately USD 6,000 per year.

### **Lessons Learned**

The system has paved the way for KP-SADP to easily track the physical progress of community projects in an efficient and effective manner.

It is one of the best systems for asset monitoring and management through uploading of pictures of assets purchased under World Bank financing.

The system is very user friendly and can be utilized by all community people. It is not limited to any specific language.

Communities can submit their issues regarding their schemes at any stage. This system has provided an easy way and window of opportunity to all local communities for submitting their needs as per their priorities.

It has also provided access to females in remote areas for connecting with the system directly from their homes via mobiles.

Using Pointer, Project teams have been able to track physical progress efficiently, effectively, and economically.

This has also ensured physical existence of activities being implemented and timely completion of tasks.







## Citation

This submission on “Guide to Project Management and Contract Management (GPMCM)”, developed by Ministry of Finance, with support of Asian Development Bank, aims to educate and guide all stakeholders in reducing negative impacts when engaged in contract/project management. With an online depository for various government instructions, guidance, forms, and submission claims, GPMCM has been used extensively, leading to better understanding of various provisions among staff and other stakeholders. As recognition of learning programs that directly contribute to improving procurement performance, this effort is selected for the Winner Award from Sri Lanka.



# Guide to Project Management and Contract Management (GPMCM) – New Approach to Improve Efficiency and Effectiveness of Procurement Outcomes



{This article is an abridged version of the submission on “New Approach to Improve Efficiency and Effectiveness of Procurement Outcomes” made by Mr. MKP Kumara, Director, Procurement Monitoring Unit, Ministry of Finance, Colombo, Sri Lanka, for the South Asia Procurement Innovation Awards.}



## Summary

The public sector in Sri Lanka enters into a large variety of contracts, which vary significantly in value, their duration, and complexity. Consequently, the nature and extent of contract management practices also vary depending on the size, nature, complexity, and risk profile of each contract. Entities and others involved in managing contracts must therefore be conversant with the general principles and practices that apply to such contracts. This will enable them to choose contract administration and management practices that are appropriate to their particular situation. Lack of such knowledge will lead to considerable wastage in terms

of time, quality, and public money. To avoid these, a “Guide to Project Management and Contract Management (GPMCM)” has been prepared as a comprehensive document to aid and help the stakeholders engaged in project management.

## Background

Government of Sri Lanka has implemented a large number of infrastructure development projects during the past decades. Some of them experienced scope changes, delays, cost overruns, disputes, and protests from society. This resulted in additional costs, prolonged social and environmental impact

| Meeting needs of citizens in time.

| Delivering service to the satisfaction of both the contracting parties.

| Ensuring benefits and value for money.

| Making provisions to ensure that there are no disputes, surprises, or delays.

during construction that denied the general public use of infrastructure facilities for years, and underutilization of local and foreign funds. Key factors that contributed to this were lack of proper project management and contract management skills, and dispute resolution within Project Management Units. To overcome these issues, the Ministry of Finance in Sri Lanka decided to streamline project and contract management activities, which led to formulation of GPMCM, with technical assistance from the Asian Development Bank (ADB).

## Challenges Addressed

GPMCM includes a recap of the legislation and related policies relevant to public sector contracting. It focuses broadly on effective management of a contract, right from entering into a contract to closure/ termination of the contract. GPMCM:

- i. Defines responsibility and authority for specific activities in contract management;
- ii. Assists project staff in ensuring compliance with contractual obligations when carrying out contract management functions;

- iii. Ensures uniformity in contract management activities of diverse projects belonging to different organizations;
- iv. Checks recurrence of problems/ weaknesses through lessons learned and corrective/ preventive measures;
- v. Facilitates training of project staff in project/ contract management, thereby enabling them to apply proper contract management practices;
- vi. Provides for establishment of a Quality Management System;
- vii. Assists project staff in safeguarding Employer's interests and fulfilling contractual obligations, so as to avoid unnecessary claims, delays, additional costs, and disputes; and
- viii. Helps the implementation agency in completing the contract within time, budget, and quality specified.

## Impacts Generated

Operationalization of GPMCM has impacted three key stakeholders – citizens, government officials, and



contractors. The impacts are by way of: i. Meeting needs of citizens in time, ii. Delivering service to the satisfaction of both the contracting parties, iii. Ensuring benefits and value for money, iv. Understanding of obligations by stakeholders under the contract, and v. Making provisions to ensure that there are no disputes, surprises, or delays.

## Level of Innovation

GPMCM has 3 three broad sections:

(i) Introduction, Principles, and Concepts of Contract Management;



(ii) Contract Management Procedures; and  
(iii) Forms, templates, and specimen letters for each contract management action. Forms, templates, and specimen letters have been customized to meet various projects needs. There are IT-based project management tools to facilitate project and/or contract management. The templates and forms are downloadable for free from the Ministry of Finance website, with facility for e-filing. Value created by this Guide is confined not only to post award but applies to the whole procurement process. There are both monetary and non-monetary value creations, where value for money

increases on timely completion of quality infrastructure.

## Replicability

GPMCM provides guidance to staff involved in implementation and monitoring of infrastructure development projects. For the purpose, it uses the harmonized version of FIDIC (Fédération Internationale des Ingénieurs-Conseils) Multi-Lateral Development Banks (FIDIC Pink Book). The Guide will also be of interest to members of Procurement Committees,

Technical Evaluation Committees, and staff in Project Management Units. GPMCM can be used by both public and private sector organizations in Sri Lanka for better management and administration of government construction contracts. As GPMCM incorporates many foreign funding agency requirements, standard forms and formats, and FIDIC conditions, this guide can be replicated for any other country with minimal changes to suit the local situations. GPMCM has already been shared with member states of the South Asia Region on consent of the South Asia Region Public Procurement Network (SARPPN).

## Scalability and Sustainability

Both public and private sector organizations are under pressure to reduce costs and improve financial and operational performance. New regulatory requirements, globalization of markets, increase in contract volumes, and complexity of projects have underlined the importance and benefits of effective contract and project management. There is also need to reengineer and improve contractual processes for compliance. GPMCM has thus been presented to various professional organizations and groups representing the construction industry including the Construction Industry Development Authority (CIDA). Their observations and suggestions for improvements have also been incorporated into the GPMCM, which is currently available on the website of the Ministry of Finance.

### Lessons Learned

This Guide has been written in simple English, as it is intended to serve as a first reference point for project staff in managing their projects effectively and efficiently. Irrespective of the source of funding, the guide provides generally accepted practices and procedures common to many projects, which are useful in addressing issues at the project implementation stage.

The rights and obligations of parties to contracts have also been explained in the Guide. Recognizing that users of the Guide will have different information needs, templates have been provided for project management documents/forms with reference to each aspect of contracting activity.

The Guide does not attempt to address all issues that may need to be considered in a particular circumstance. It identifies the key issues and considerations that entities should be aware of in administration and management of contracts.

As such, the Guide is intended to be a general reference document for senior managers, contract managers, and stakeholders involved in project management.





For more information, visit:  
[www.procurementnet.org/sapia](http://www.procurementnet.org/sapia)



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